

William Paterson University  
College of Science and Health - Department of Computer Science

Fall 2018 – Spring 2019 Assessment Cycle  
Analysis of the Results of the Evaluations of the Assessment Data  
of  
the Program Student Outcome

**Program Student Outcome:** S1: Communicate effectively in a variety of professional contexts.

**Assessment Committee Members:** Gilbert Ndjatou (Chair), Bogong Su, Erh-Wen Hu

**Date:** May 28, 2019

**Updated On:** \_\_\_\_\_

**A. Analysis of the Results of the Evaluations of the Assessment Data**

For the assessment period Fall 2018 to Spring 2019, this student outcome was assessed in the following four courses: CS3410, CS3450, CS3500 (two sections in spring 2019), and CS4800.

In CS3410, 21 and 14 students respectively took the course and all of them have at least an adequate ability. However, it is observed that some students have mistakes in their oral presentation in spring 2019.

In CS3450, 19 and 9 students respectively took the course and 3 of them (which represents 10.7%) did have less than adequate ability as they failed to put in enough effort. It is noted that many of the reports are well written and well documented.

In CS3500, 25, 26, and 24 students respectively took the course and all of them had at least an adequate ability. It is noticed that with the explanation of examples of the presentations, most of the teams followed the advice and did very good presentations. The presentation slides were mostly well designed and well written.

In CS4800, 15 and 15 students respectively took the course and all of them have at least an adequate ability. It is noted that most of the team did a good presentation.

**B. Suggestions for Improvement:** N/A

**C. Improvements Implemented:** N/A

**D. List all the “performance level/frequency/percentage” tables and their sources.**

a. Faculty Course Assessment Report : CS3410, Fall 2018

**Data Collected:** Each student’s level of performance on oral and written communication

**Method of Collection:** Each student is required to make an oral presentation (students evaluation 25%, faculty evaluation 25%) and to produce a written report (faculty evaluation 50%) on a digital logic design topic.

Performance Levels	Frequency	Percentage
No Ability	0	0%
Some Ability	0	0 %
Adequate Ability	0	0%
More than Adequate Ability	6	29%
High Ability	15	71%

**Observations:** All teams’ oral presentations are good.

---

b. Faculty Course Assessment Report : CS3410, Spring 2019

**Data Collected:** Each student’s level of performance on oral presentation

**Method of Collection:** Each student is required to make an oral presentation and demo their digital logic design project.

Performance Levels	Frequency	Percentage
No Ability	0	0%
Some Ability	0	0 %
Adequate Ability	0	52%
More than Adequate Ability	4	29%
High Ability	10	71%

**Observations:** Almost half teams’ oral presentations have mistakes.

---

c. Faculty Course Assessment Report : CS3450, Fall 2018

**Data collected:** Performance on a written report and program documentation.

**Method of collection:** Each student is required to read a substantial article on “The History and Evolution of the UNIX, Linux, and Android Operating Systems” and submit a written report. In addition, each student is required to complete eight UNIX system programs with source code fully documented. The report is graded on contents, organization, and clarity; besides its correctness, source code documentation is considered an important part of communication in professional context with whoever reads the source code and will thus be graded on clarity.

Performance Levels	Frequency	Percentage
No Ability (level of performance of F)	0	0
Some Ability (level of performance of D )	3	15.8%
Adequate Ability (level of performance C)	4	21.0%
More than Adequate Ability (level of performance of B)	6	31.6%
High Ability level of performance of A)	6	31.6%

**Observation:** This is a highly motivated class with a group of highly motivated and hard-working students enthusiastic about learning. All handed in reports and most of them are well written. Nearly 70% of the class handed in all programming assignments that were well-documented. The three students who received D grade were the exceptions, as they failed to put in enough effort.

d. Faculty Course Assessment Report : CS3450, spring 2019

**Data Collected:** Each student's level of performance on a written report.

**Method of Collection:** Each student is required to write a report on one of the following OS topics: Virtualization and the Cloud, Multiple Processor Systems, Security, UNIX, LINUX, and Android, Windows 8, and Operating System Design. He/she then receives a numerical grade based on the organization, presentation, and the narrative of the report.

Performance Levels	Frequency	Percentage
No Ability (level of performance of F)	0	0%
Some Ability (level of performance of D )	0	0%
Adequate Ability	5	55.6%

(level of performance C)		
More than Adequate Ability (level of performance of B)	2	22.2%
High Ability level of performance of A)	2	22.2%

**Observations:** One student did not return her report. Two students wrote reports that I found very impressive in terms of organization and contents. Two other students wrote well organized reports but their contents were a little bit shallow. The rest of class did relatively well with the contents of their reports, but these reports were practically long essays with very little organization.

---

e. Faculty Course Assessment Report : CS3500, Fall 2018

**Data Collected:** The data collected was based on each project team's level of performance on oral and written communication (in fall 2018, there were 8 project teams; 5 teams had 3 students in each team, 2 teams had 4 students in each team, and 1 team had 2 students due to a student withdrew late in the semester).

**Method of Collection:** Each project team (all team members must participate) did a 20-minute presentation (15 minutes presentation plus 5 minutes for questions and answers). Instructor feedback was given at the end of each presentation. Presentations were graded on the following four categories: Organization of Materials, Contents of Presentation, Presenter's Knowledge, and Overall Rating of the Presentation. Each team needed to hand in the presentation slides which consist of the Use Case Model, Use Case Description/Narrative of a particular use case, Class Diagrams, and the Communication/Sequence Diagram of the particular use case that the team decided to present. The frequency listed below is team frequency, not student frequency.

Performance Levels	Frequency	Percentage
No Ability (Level of performance of F)	0	0%
Some Ability (Level of performance of D)	0	0%
Adequate Ability (Level of performance of C)	0	0%
More than Adequate Ability (Level of performance of B)	1	12.5%
High Ability (Level of performance of A)	7	87.5%

**Observations:** One week before the presentation, I gave them an example of the presentation. All the teams followed the advice and did very good presentations. The presentation slides were mostly well designed and well written. All teams scored "high" in the "Organization of Materials" category. Most common mistake was in the Communication Diagram where students put the

operations/services in the wrong classes. More examples of the dynamic relationships should be given in class.

---

f. Faculty Course Assessment Report : CS3500, Spring 2019

**Data Collected:** The data collected was based on each project team's level of performance on oral and written communication (in spring 2019, there were 8 project teams; 6 teams had 3 students in each team and 2 teams had 4 students in each team).

**Method of Collection:** Each project team (all team members must participate) did a 20-minute presentation (15 minutes presentation plus 5 minutes for questions and answers). Instructor feedback was given at the end of each presentation. Presentations were graded on the following four categories: Organization of Materials, Contents of Presentation, Presenter's Knowledge, and Overall Rating of the Presentation. Each team needed to hand in the presentation slides which consist of the Use Case Model, Use Case Description/Narrative of a particular use case, Class Diagrams, and Communication Diagram of the particular use case that the team decided to present. The frequency listed below is team frequency, not student frequency.

Performance Levels	Frequency	Percentage
No Ability (Level of performance of F)	0	0%
Some Ability (Level of performance of D)	0	0%
Adequate Ability (Level of performance of C)	0	0%
More than Adequate Ability (Level of performance of B)	8	100%
High Ability (Level of performance of A)	0	0%

**Observations:** One week before the presentation, I gave them an example of the presentation. All the teams followed the advice and did a relatively good job. All the teams finished within the allotted time and we completed all the presentations in one class period.

---

g. Faculty Course Assessment Report : CS3500, Spring 2019

**Data Collected:** The data collected was based on each project team's level of performance on oral and written communication (in spring 2019, there were 8 project teams and each team consisted of 3 students).

**Method of Collection:** Each project team (all team members must participate) did a 20-minute presentation (15 minutes presentation plus 5 minutes for questions and answers). Instructor feedback was given at the end of each presentation. Presentations were graded on the following four categories: Organization of Materials, Contents of Presentation, Presenter's Knowledge, and Overall Rating of the Presentation. Each team needed to hand in the presentation slides which consist of the Use Case Model, Use Case Description/Narrative of a particular use case, Class Diagrams, and Communication Diagram of the

particular use case that the team decided to present. The frequency listed below is at the team level.

Performance Levels	Frequency	Percentage
No Ability (Level of performance of F)	0	0%
Some Ability (Level of performance of D)	0	0%
Adequate Ability (Level of performance of C)	2	25%
More than Adequate Ability (Level of performance of B)	2	25%
High Ability (Level of performance of A)	4	50%

**Observations:** Instructions were given to the students on how to conduct the project presentation and what they needed to present. Most teams did a good job and two teams were not prepared well and with some mistakes on the construction of the Communication diagrams. Four teams did an outstanding job in showcasing their design.

---

h . Faculty Course Assessment Report : CS4800, Fall 2018

**Data Collected:** The data collected was based on each project team’s level of performance on oral and written communication (in Fall 2018, there were 15 students divided to 4 project teams and each team consisted of 3-4 students).

**Method of Collection:** Each project team (all team members must participate) did a 20-minute presentation (15 minutes presentation plus 5 minutes for questions and answers). The presentations were given for each of the 3 phases of the project. Instructor feedback was given at the end of each presentation. Presentations were graded on the following four categories: Organization of Materials, Contents of Presentation, Presenter’s Knowledge, and Overall Rating of the Presentation. Each team needed to hand in the presentation slides. The frequency listed below is at the team level. The project presentations represent 15 % of the course grade.

Performance Levels	Frequency	Percentage
No Ability (Level of performance of F)	0	0%
Some Ability (Level of performance of D)	0	0%
Adequate Ability (Level of performance of C)	4	26.7%
More than Adequate Ability (Level of performance of B)	4	26.7%
High Ability (Level of performance of A)	7	46.7%

**Observations:** Instructions were given to the students on how to conduct the project presentation and what they needed to present. Two teams did an outstanding job in showing their design. One team did a reasonable job. The last team did

an adequate presentation.

---

i. Faculty Course Assessment Report : CS4800, Spring 2019

**Data Collected:** The data collected was based on each project team's level of performance on oral and written communication (in Spring 2019, there were 15 students divided to 5 project teams and each team consisted of 3 students).

**Method of Collection:** Each project team (all team members must participate) did a 20-minute presentation (15 minutes presentation plus 5 minutes for questions and answers). The presentations were given for each of the 3 phases of the project. Instructor feedback was given at the end of each presentation. Presentations were graded on the following four categories: Organization of Materials, Contents of Presentation, Presenter's Knowledge, and Overall Rating of the Presentation. Each team needed to hand in the presentation slides. The frequency listed below is at the team level. The project presentations represent 15 % of the course grade.

Performance Levels	Frequency	Percentage
No Ability (Level of performance of F)	0	0%
Some Ability (Level of performance of D)	0	0%
Adequate Ability (Level of performance of C)	0	0%
More than Adequate Ability (Level of performance of B)	0	0%
High Ability (Level of performance of A)	15	100%

**Observations:** Instructions were given to the students on how to conduct the project presentation and what they needed to present.

---